

**MISSOURI STATE BOARD OF HEALTH  
BUREAU OF VITAL STATISTICS  
CERTIFICATE OF DEATH**

Do not use this space.

32800

OCT 17 1934

**1. PLACE OF DEATH**

County Jackson Registration District No. 399  
 Township Waco Primary Registration District No. 1002  
 City Kansas City (No. W.C. General Hosp) St. \_\_\_\_\_ Ward \_\_\_\_\_

File No. \_\_\_\_\_  
 Registered No. 41500  
 St. \_\_\_\_\_ Ward \_\_\_\_\_

**2. FULL NAME**

Villa Gusman  
 (a) Residence, No. 3940 Norton St Ward. \_\_\_\_\_  
 (Usual place of abode) (If nonresident, give city or town and State)  
 Length of residence in city or town where death occurred 17 yrs. mos. ds. How long in U. S., if of foreign birth? yrs. mos. ds.

**PERSONAL AND STATISTICAL PARTICULARS**

3. SEX 7 4. COLOR OR RACE W. 5. SINGLE, MARRIED, WIDOWED, OR DIVORCED (write the word) Married  
 5A. IF MARRIED, WIDOWED, OR DIVORCED HUSBAND OF (OR) WIFE OF Staley Gusman  
 6. DATE OF BIRTH (MONTH, DAY, AND YEAR) Feb 24-1887  
 7. AGE YEARS MONTHS DAYS IF LESS than 1 day, hrs. or min. 47 6 18  
 OCCUPATION 8. Trade, profession, or particular kind of work done, as spinner, sawyer, bookkeeper, etc. none  
 9. Industry or business in which work was done, as silk mill, saw mill, bank, etc. \_\_\_\_\_  
 10. Date deceased last worked at this occupation (month and year) \_\_\_\_\_ 11. Total time (years) spent in this occupation \_\_\_\_\_

**MEDICAL CERTIFICATE OF DEATH**

21. DATE OF DEATH (MONTH, DAY, AND YEAR) 9-9-34  
 22. I HEREBY CERTIFY, That I attended deceased from 8-23-34 to 9-7-34  
 I last saw him alive on 9-7-34 Death is said to have occurred on the date stated above, at 11:45 a.m.  
 The principal cause of death and related causes of importance were as follows:  
Pulmonary Tuberculosis  
 Date of onset \_\_\_\_\_  
 Other contributory causes of importance: 73  
 Name of operation \_\_\_\_\_ Date of \_\_\_\_\_  
 What test confirmed diagnosis? \_\_\_\_\_ Was there an autopsy? Yes  
 23. If death was due to external causes (violence), fill in also the following:  
 Accident, suicide, or homicide? \_\_\_\_\_ Date of injury \_\_\_\_\_, 19\_\_\_\_  
 Where did injury occur? \_\_\_\_\_ (Specify city or town, county, and State)  
 Specify whether injury occurred in industry, in home, or in public place. \_\_\_\_\_  
 Manner of injury \_\_\_\_\_  
 Nature of injury \_\_\_\_\_  
 24. Was disease or injury in any way related to occupation of deceased?  
 If so, specify \_\_\_\_\_ (Signed) J. H. Gennett, M. D.  
 (Address) W. C. General Hosp

12. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) Waco Tex  
 13. NAME John Providence  
 14. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) Waco Tex  
 15. MAIDEN NAME Emma Horn  
 16. BIRTHPLACE (CITY OR TOWN) (STATE OR COUNTRY) Waco Tex  
 17. INFORMANT (ADDRESS) Deura Clark W. C. General Hosp  
 18. BURIAL, CREMATION, OR REMOVAL PLACE Howard Hill DATE Sept. 10 1934  
 19. UNDERTAKER (ADDRESS) A. P. Dackler 1415 E 152  
 20. FILED 9-9-34 1934 M. M. Crowe Registrar.

WRITE PLAINLY, WITH UNFADING INK--THIS IS A PERMANENT RECORD

N. B.—Every item of information should be carefully supplied. AGE should be stated EXACTLY. PHYSICIANS should state CAUSE OF DEATH in plain terms, so that it may be properly classified. Exact statement of OCCUPATION is very important.

82 21 5

PHYSICS 311, FALL 1998, HOMEWORK 10

1. A particle of mass  $m$  moves in a circular path of radius  $r$  in a horizontal plane. The particle's position is given by the vector  $\mathbf{r}(t) = r \cos(\omega t) \mathbf{i} + r \sin(\omega t) \mathbf{j}$ , where  $\mathbf{i}$  and  $\mathbf{j}$  are unit vectors in the  $x$  and  $y$  directions, respectively, and  $\omega$  is a constant angular frequency.

(a) Find the velocity  $\mathbf{v}(t)$  and acceleration  $\mathbf{a}(t)$  of the particle.

(b) Show that the acceleration is always directed toward the center of the circle.

(c) Find the magnitude of the acceleration.

(d) Find the magnitude of the force acting on the particle.